## CEREAL RUST BULLETIN

Report No. 2

April 24, 1996

From:

CEREAL RUST LABORATORY
U.S. DEPARTMENT OF AGRICULTURE
UNIVERSITY OF MINNESOTA, ST. PAUL 55108

(612) 625-6299 FAX (612) 649-5054 Internet: markh@puccini.crl.umn.edu

Issued by:

AGRICULTURAL RESEARCH SERVICE U.S. DEPARTMENT OF AGRICULTURE

(In cooperation with the Minnesota Agricultural Experiment Station)

Winter wheat development is behind normal and in need of rain throughout much of the southern wheat-growing area of the United States. In Kansas, conditions have been drier and cooler than normal and much of the wheat crop is in poor to fair condition.

Wheat stem rust. During the second week in April, centers of wheat stem rust were found in soft red winter wheat fields 60 miles southwest of Houston, Texas. The crop was in the berry stage, which means the crop development was 2 weeks behind normal. Although there had been little rain, dews which were needed for rust infection occurred in this area, which is within 50 miles of the Gulf Coast. In the past two weeks, moisture conditions have not been ideal for infection and the crop is close to maturity; therefore, losses to stem rust will be light in these fields. However, this area will be an inoculum source of wheat stem rust spores for susceptible wheat farther north. In nursery plots in Beaumont and Beeville, Texas, severities of less than 5% were observed on susceptible wheat at the soft dough stage.

Wheat leaf rust. In the past two weeks, the slower than normal leaf rust development in the southern United States was due to drier and cooler than normal conditions and less rust inoculum overwintering in the southern locations. In southern Texas fields, rust was light and in southern Texas plots of susceptible cultivars, 40% severities were observed which is much less than normal. During the third week in April, no wheat leaf rust was observed in fields and plots in north central Texas.

By mid-April, in the southeastern soft red wheat area, wheat leaf rust was severe in nursery plots in southeastern Louisiana and light in plots in the panhandle of Florida. In some Louisiana fields, 10% rust severities were observed on the flag leaf, but in the majority of the fields rust was less severe.

During the second week in April, leaf rust was reported on cultivars growing in nurseries and fields in the Sacramento Valley in California.

**Wheat stripe rust.** By the second week in April, wheat stripe rust was starting to increase in the San Joaquin Valley and traces were found in the Sacramento Valley of California.

**Oat stem rust.** In mid-April, traces of oat stem rust were found in a nursery in southeastern Louisiana. Usually by this date oat stem rust is severe in these plots.

**Oat crown rust.** During mid-April, crown rust was light in southern Texas fields and plots. This area will provide very little crown rust inoculum for oat-growing areas farther north.

By the second week in April, oat crown rust was found in a southeastern Louisiana nursery and 15% severities were reported in oat spreader rows.

During mid-April, traces of crown rust were found on wild oats growing in the Sacramento Valley of California.

**Barley stem rust**. As of April 21, no stem rust has been reported on barley in the U.S. this year. Limited amounts of barley are grown commercially in the southern states. Stem rust on barley rarely occurs in this area.

Barley leaf rust. There have been no new reports of barley leaf rust since the last bulletin.

**Stripe rust on barley.** By the third week in April, barley stripe rust was severe on susceptible cultivars growing in nurseries in the San Joaquin and Sacramento valleys of California. Most of the released cultivars are susceptible to barley stripe rust, but some of the lines in the nursery are resistant to the rust.

In mid-April, barley was heavily infected with barley stripe rust in winter trial plots in northwestern Oregon at Corvallis. The rust first developed in susceptible border rows and then spread quickly to other cultivars in the plots. The most heavily rusted plants had 100% stripe rust on the bottom three leaves. Since none of the susceptible wheat growing near these plots had stripe rust, it probably was barley stripe rust. No stripe rust was observed on barley growing in fields in northwestern Oregon.

**Rye rusts**. As of April 21, no leaf or stem rust of rye has been reported in the U.S.